
LETCHER COUNTY

(Letcher County Water Service Area Map)

- Estimated 1999 population of 26,500--30% on public water
- Estimated 2020 population of 25,800--77% on public water
- 72 miles of water lines, with plans for additional 300 miles
- Estimated funding needs for public water 2000-2005--\$18,575,000
- Estimated funding needs for public water 2006-2020--\$30,800,000

Letcher County had an estimated population of 26,479 (10,240 households) in 1999 with a projected population of 25,800 (11,300 households) in 2020. Public water is provided to about 30 percent of the county's residents. In areas of the county not served by public water, more than 90 percent of the households rely on private domestic wells and the remaining households rely on other sources. About 5,260 customers will be added to public water service through new line extensions in 2000-2020.

In 1998 Letcher County formed the Letcher County Water and Sewer District. They are not yet providing water to residents, but they do have an agreement with the Blackey Water Treatment Plant to purchase wholesale water so they can serve nearly 800 households in the Isom/Jeremiah area. The district also passed a resolution of intent to join the Carr Creek Water Commission.

The biggest problem facing Letcher County is a reliable source of water. There is insufficient surface water to serve the entire county's future needs. There are a couple of deep mine wells that may provide a source, but the most likely source would be Carr Creek Lake. The proposed Carr Creek Water Treatment Plant, to be owned by the Carr Creek Water Commission, of which Letcher County is a part, could provide up to 2 million gallons of water per day to the county. Most of the county's long range projects in this report have no source of water currently available. However, if a treatment plant is placed on Carr Creek Lake, this plant, along with existing water supplies such as deep wells should be adequate to serve Letcher County for many years.

WATER SERVICE AREAS

LETCHER COUNTY

Kentucky

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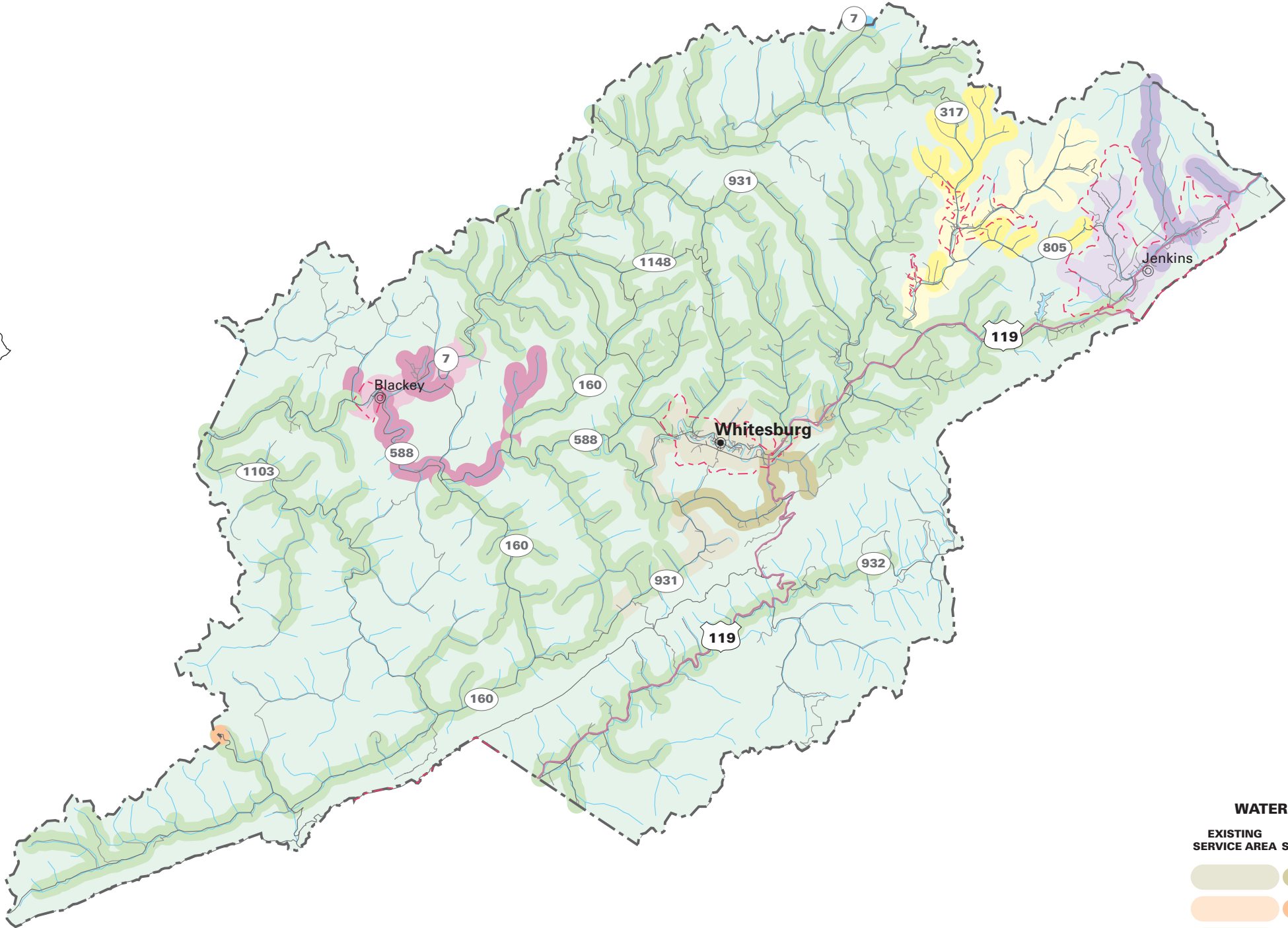
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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		WHITESBURG MUNICIPAL WATER WORKS
		VICCO WATER SUPPLY
		LETCHER COUNTY WATER DISTRICT
		JENKINS WATER SYSTEM
		FLEMING-NEON WATER COMPANY
		CANEY CREEK WATER DISTRICT
		BLACKEY WATER SYSTEM

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	In \$1000
LETCHER								-
Letcher County Water & Sewer District	79.9	1,708	6,425		2,000	5,000	1,200	14,625
Fleming-Neon or LCWSD	10.3	477	2,000				1,200	3,200
Jenkins	6.6	52	350				300	650
Blackey or LCWSD	1.6	70	100					100
Total	98.4	2,307	8,875		2,000	5,000	2,700	18,575

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	In \$1000
LETCHER								-
Letcher County Water & Sewer Dist.	203.2	2,949	13,000		6,000	10,000	1,800	30,800
Total	203.2	2,949	13,000		6,000	10,000	1,800	30,800

PUBLIC WATER SYSTEMS

There are currently 21 public and semi-public water service providers in the county: 5 municipal systems--the Jenkins Municipal System, the Fleming-Neon Water Company, the Blackey Water Treatment Plant, the Whitesburg Municipal Water System, and Jackhorn Water Supply; and 16 non-community systems.

WHITESBURG MUNICIPAL WATER WORKS

PWSID: 0670466
 System Type: COMMUNITY
 Owner Type: MUNICIPAL
 Surface Source: KENTUCKY RIVER
 Purchase Source:
 Well Source:
 Sells Water to:
 Treatment Plant Capacity (MGD): 0.86
 Percent Daily Average Production: 44.00
 Total Tank Storage Capacity (gallons): 1,100,000.00
 Total Service Connections: 680.00
 Number of Employees: 8.00
 Treatment Operator Class: 2D
 Distribution Operator Class: 3A
 Customer Rate for 1,000 Gallons: Not available
 O/M costs 1997: Not available
 O/M costs per Service Connection: Not available
 Net Revenue 1997: Not available
 Total Water Produced 1997 (gallons): Not available
 Water Sold 1997 (gallons): Not available
 Unaccounted-for Water 1997 (%): Not available

The Whitesburg Water Plant gets its water from the North Fork of the Kentucky River. The system currently serves 680 households. Plant capacity is 864,000 gpd, with an average daily production of 280,000 gallons. Storage capacity is 1,100,000 gallons. They employ 8 full time people.

Several problems exist within the Whitesburg facility. There have been many problems with the recently expanded plant. The system has a very large amount of debt, and there is an old ordinance in place that effectively doubles the rate structure for customers outside the city limits. There is also a very limited source of water.

BLACKEY WATER SYSTEM

PWSID: 0670462
System Type:..... COMMUNITY
Owner Type: MUNICIPAL
Surface Source: NORTH FORK KENTUCKY RIVER
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 0.15
Percent Daily Average Production:..... 36.00
Total Tank Storage Capacity (gallons): 150,000.00
Total Service Connections: 286.00
Number of Employees:..... 1.00
Treatment Operator Class: 1D
Distribution Operator Class:..... 2A
Customer Rate for 1,000 Gallons:..... 10.27
O/M costs 1997:..... Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons):..... Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The Blackey Water Treatment Plant draws its water from the North Fork of the Kentucky River. The system has been on line less than a year, and serves 270 households. The plant has a capacity of 150,000 gpd (easily expandable), and has an average daily withdrawal of 18,000 gallons. Storage capacity is 150,000 gallons. The current rates are \$20.54 for the first 2,000 gallons. They have one full time employee.

FLEMING-NEON WATER COMPANY

PWSID: 0670279
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source: PRIMARY
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.43
Percent Daily Average Production: 57.00
Total Tank Storage Capacity (gallons): 50,000.00
Total Service Connections: 979.00
Number of Employees: 5.00
Treatment Operator Class: 2D
Distribution Operator Class: 2A
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The Fleming-Neon Water Company gets its water from 2 abandoned deep mines. The system serves 905 households. Plant capacity is 430,000 gpd, with an average daily production of 210,000 gallons. Current storage capacity is 200,000 gallons. Rates are \$9.25 minimum for the first 2,000 gallons. The water company employs 5 full time people.

JENKINS WATER SYSTEM

PWSID: 0670213
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source: ELKHORN LAKE
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 1.00
Percent Daily Average Production: 45.00
Total Tank Storage Capacity (gallons): 415,000.00
Total Service Connections: 0.00
Number of Employees: 10.00
Treatment Operator Class: 2D
Distribution Operator Class: 3A
Customer Rate for 1,000 Gallons: 5.66
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The Jenkins Municipal System draws its water from Elkhorn Lake Reservoir. The system serves 953 customers. Plant capacity is 1 million gpd, with an average daily production of 400,000 gallons. Current storage capacity is 415,000 gallons. The water and sewer rate schedule is somewhat complex, but the average customer with water only would pay \$22.66 for 4,000 gallons of water. The City of Jenkins was selected to be a participant in the Governor's Community Development Initiative. This, along with the completion of new Hwy 23 is expected to create significant growth in the area. They will need to find an additional source of water and possibly upgrade their plant in order to meet this increased demand. The city also has an immediate need to replace and relocate about 5 miles of line running to the Marshall Branch area..

OTHER SYSTEMS

JACKHORN WATER SUPPLY

Jackhorn Water Supply is located in Letcher County. The system serves a population of 200 and has 60 service connections. The community system has treatment capacity of 15,000 gallons per day. The water source is ground water from an abandoned mine.

BECKHAM BATES ELEMENTARY

Beckham Bates Elementary is located in Letcher County. The system serves a population of 310 and has 1 service connection. The local, non-transient, non-community system has treatment capacity of 30,000 gallons per day and the water source is wells.

ARLIE BOGG ELEMENTARY SCHOOL

Arlie Bogg Elementary School is located in Letcher County. The system serves a population of 320 and has 32 service connections. The local, non-transient, non-community system has treatment capacity of 35,000 gallons per day and the water source is wells.

DOUBLE QUICK MART

Double Quick Mart is located in Letcher County. The system serves a population of 400 and has 1 service connection. The private, non-transient, non-community system has treatment capacity of 14,000 gallons per day and the water source is wells.

JOE'S DRIVE IN

Joe's Drive In is located in Letcher County. The system serves a population of 100 and has 1 service connection. The private, transient, non-community system has treatment capacity of 12,000 gallons per day and the water source is wells.

HOLCOMB CUSTARD STAND

Holcomb Custard Stand is located in Letcher County. The system serves a population of 50 and has 1 service connection. The private, transient, non-community system has treatment capacity of 12,000 gallons per day and the water source is wells.

MAYKING HEADSTART CENTER

Mayking Headstart Center is located in Letcher County. The system serves a population of 50 and has 1 service connection. The local, non-transient, non-community system has treatment capacity of 100 gallons per day and the water source is wells.

CONSOL OF KY

Consol Of Ky. is located in Letcher County. The system serves a population of 20 and has 15 service connections. The private, transient, non-community system has treatment capacity of gallons per day and the water source is wells.

KINGDOM COME SETTLEMENT

Kingdom Come Settlement is located in Letcher County. The system serves a population of 225 and has 1 service connection. The private, non-transient, non-community system has treatment capacity of 30,000 gallons per day and the water source is wells.

MARTIN HOLBROOK REST & MOBILE HOME PARK

Martin Holbrook Rest & Mobile Home Park is located in Letcher County. The system serves a population of 75 and has 10 service connections. The private, transient, non-community system has treatment capacity of 12,000 gallons per day and the water source is wells.

OVEN FORK SENIOR CITIZEN CENTER

Oven Fork Senior Citizen Center is located in Letcher County. The system serves a population of 35 and has 1 service connection. The local, non-transient, non-community system has treatment capacity of 7,000 gallons per day and the water source is wells.

COWEN HEADSTART

Cowen Headstart is located in Letcher County. The system serves a population of 30 and has 1 service connection. The local, non-transient, non-community system has treatment capacity of 7,000 gallons per day and the water source is wells.

PARKWAY MOTEL RESTAURANT

Parkway Motel Restaurant is located in Letcher County. The system serves a population of 100 and has 1 service connection. The private, non-transient, non-community system has treatment capacity of 2,000 gallons per day and the water source is wells.

DEANE QUICK STOP

Deane Quick Stop is located in Letcher County. The system serves a population of 100 and has 1 service connections. The private, transient, non-community system has treatment capacity of 10,000 gallons per day and the water source is wells.

KINGS CREEK SENIOR CITIZENS CENTER

Kings Creek Senior Citizens Center is located in Letcher County. The system serves a population of 50 and has 15 service connections. The private, non-transient, non-community system has treatment capacity of 10,000 gallons per day and the water source is wells.

ISOM IGA

Isom IGA is located in Letcher County. The system serves a population of 100 and has 15 service connections. The private, transient, non-community system has treatment capacity of 10,000 gallons per day and the water source is wells.

GOLF CONCEPTS, INC

Golf Concepts, Inc is located in Letcher County. The system serves a population of 50 and has 1 service connection. The private, transient, non-community system has treatment capacity of 3,750 gallons per day and the water source is wells.

PRIVATE DOMESTIC SYSTEMS

About 18,500 Letcher countians depend on private domestic water supplies: about 17,000 on wells, and 1,500 on other sources. The Sandlick area of Letcher County currently has problems with a lack of water in private wells. Most other areas of the county have high levels of iron or sulfur.

More than three-quarters of the wells drilled in valley bottoms and on mountainsides are adequate for a domestic supply. Some wells on ridges and mountaintops are adequate for domestic supply. Drilled wells more than 200 feet deep in valleys may yield enough water for small municipal or industrial supplies. In the area north of Pine Mountain, ground water from most drilled wells is moderately hard and contains noticeable amounts of iron. Salty water in drilled wells probably will not be found less than 200 feet above the principal valley bottoms.

In the area along Pine Mountain and south of the mountain, the water quality is slightly better with few wells less than 300 feet below the principal valley bottoms will yield salty water. The ground water is soft but contains noticeable amounts of iron. This area also contains limestone beds that when faulted and below drainage may yield several hundred gallons per minute. Springs in this area will yield 50 gpm, but generally yield less than 10gpm.
